

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 12. (Cancelled)

13. (Currently Amended) A light-emitting ceiling tile comprising a ceiling tile substrate and a planar light-emitting subassembly shaped like the ceiling tile substrate and disposed on the ceiling tile substrate in a laminar arrangement, the subassembly comprising light-emitting group IV nanostructures, wherein the ceiling tile substrate comprises two opposing flat faces and a perimeter, and the light-emitting subassembly comprises two opposing flat faces and a perimeter.

14. (Original) The light-emitting ceiling tile according to claim 13, wherein the light-emitting subassembly comprises a first electrical insulation layer, upon which is disposed a first electrode layer, upon which is disposed a light-emitting layer which comprises the light-emitting group IV nanostructures, upon which is disposed a second electrode, upon which is disposed a second electrical insulation layer.

15. (Original) The light-emitting ceiling tile according to claim 14, wherein the first electrical insulation layer and the first electrode layer are substantially transparent to the light emitted by the light-emitting layer.

16. (Original) The light-emitting ceiling tile according to claim 13, wherein the ceiling tile is adapted to provide contact with a voltage source.

17. (Cancelled)

18. (Original) The light-emitting ceiling tile according to claim 13, further comprising a reflective layer.

19. (Original) The light-emitting ceiling tile according to claim 13, further comprising an electron transport layer and a hole transport layer.

20 – 21. (Cancelled)

22. (Currently Amended) The ~~subassembly~~ light-emitting ceiling tile according to claim 2013, wherein the group IV nanoparticles are core-shell nanoparticles.

23. (Currently Amended) The ~~subassembly~~ light-emitting ceiling tile according to claim 2013, wherein the group IV nanoparticles are core-shell nanoparticle comprising silicon.

24 – 29. (Cancelled)

30. (Currently Amended) The ~~subassembly~~ light-emitting ceiling tile according to claim 2013, wherein the sub-assembly emits white light.

31. (Cancelled)

32. (Original) A subassembly for use in a light-emitting ceiling tile, the subassembly comprising a first electrode layer, a light-emitting layer which comprises light-emitting group IV nanostructures, and a second electrode layer, wherein the subassembly comprises two opposing faces and a perimeter edge, and wherein the first electrode layer is transparent to the light emitted by the light-emitting layer.

33. (Original) The subassembly according to claim 32, wherein the subassembly is adapted to provide contact with a voltage source.

34. (Original) The subassembly according to claim 32, wherein the nanostructures are nanoparticles.

35. (Original) The subassembly according to claim 32, further comprising a reflective layer.

36. (Original) The subassembly according to claim 32, further comprising an electron transport layer and a hole transport layer.

37. (Original) The subassembly according to claim 34, further comprising a reflective layer.

38. (Original) The subassembly according to claim 34, further comprising an electron transport layer and a hole transport layer.

39. (Original) The subassembly according to claim 37, further comprising an electron transport layer and a hole transport layer.

40. (Original) A light-emitting ceiling tile device, comprising:
a plurality of nanoparticles, the nanoparticles comprising a group IV semiconductor and a capping agent coupled to the group IV semiconductor, wherein the nanoparticles have an average diameter of between about 0.5 nm to about 15 nm; and
a first electrode electrically coupled to the plurality of nanoparticles; and
a second electrode electrically coupled to the plurality of nanoparticles;
wherein the first and second electrodes together are configured to conduct an applied current to the nanoparticles, wherein the nanoparticles produce light in response to the applied current.

41. (Cancelled)

42. (Original) The method of making a light-emitting subassembly comprising combining (a) a light-emitting layer comprising light-emitting group IV nanoparticles, (b) first and second electrode layers, and (c) first and second electrical insulation layers, wherein the layers (a), (b), and (c) are in laminar arrangement, wherein the first electrode is disposed on the first electrical insulation layer, and the first electrode and the first electrical insulation layer are transparent.

43. (Currently Amended) Use of the ceiling tile according to claim ~~1-~~or~~ 13~~ for emergency lighting.

44. (Currently Amended) Use of the ceiling tile according to claim ~~1-~~or~~ 13~~ for in-door lighting.

45. (Currently Amended) Use of the ceiling tile according to claim ~~1-~~or~~ 13~~ for track lighting.

46. (Currently Amended) Use of the ceiling tile according to claim ~~4~~^{or} 13 for direct lighting of an airplane interior.

47 - 51. (Cancelled)

52. (New) The light-emitting ceiling tile according to claim 14, wherein the group IV nanostructures are core-shell nanoparticles.

53. (New) The light-emitting ceiling tile according to claim 14, wherein the group IV nanostructures are core-shell nanoparticles comprising Si.

54. (New) The light-emitting ceiling tile according to claim 13, wherein the group IV nanostructures are Si nanoparticles.

55. (New) The light-emitting ceiling tile according to claim 13, wherein the group IV nanostructures are Ge nanoparticles.

56. (New) The light-emitting ceiling tile according to claim 13, wherein the group IV nanostructures are SiGe alloy nanoparticles.

57. (New) The subassembly according to claim 32, wherein the group IV nanostructures are Si nanoparticles.

58. (New) The subassembly according to claim 32, wherein the group IV nanostructures are Ge nanoparticles.

59. (New) The subassembly according to claim 32, wherein the group IV nanostructures are SiGe alloy nanoparticles.

60. (New) The subassembly according to claim 32, wherein the group IV nanostructures are core-shell nanoparticles.

61. (New) The subassembly according to claim 32, wherein the group IV nanostructures are core-shell nanoparticles comprising Si.

62. (New) The method of according to claim 42, wherein the group IV nanoparticles are Si nanoparticles.

63. (New) The method according to claim 42, wherein the group IV nanoparticles are Ge nanoparticles.

64. (New) The method according to claim 42, wherein the group IV nanoparticles are SiGe alloy nanoparticles.

65. (New) The method according to claim 42, wherein the group IV nanoparticles are core-shell nanoparticles.

66. (New) The method of according to claim 42, wherein the group IV nanoparticles are core-shell nanoparticles comprising Si.